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Matrix Organisation

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MATRIX ORGANISATION

The design of cross-beat teamwork in newsrooms

Confronted with increased internal and external complexity, traditional forms of newswork meet their limits. Journalistic start-ups, such as Quartz and NZZ.at, form emerging editorial teams around “obsessions” or “phenomena” to gain cross-beat perspectives of complex issues. Legacy media experimenting with cross-beat newswork see themselves confronted with challenges arising predominantly from beat structures. This paper focuses on an example of cross-beat teamwork at a major Swiss daily newspaper, investigating the journalists’ experiences in a particular project. Insights from 13 interviews indicate that a matrix organisation is a way to organise cross-beat topic-focused newswork at larger newsrooms. A matrix organisation combines traditional functional hierarchy (i.e. the beat structure) with a project dimension. Based on insights from organisational studies, I compare the known advantages and disadvantages of a matrix organisation with journalists’ experiences and derive implications for the introduction and design of a matrix organisation in newsrooms.

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KEYWORDS Cross-Beat Teamwork; Editorial Structures; Matrix Organisation; Newswork; Complexity

INTRODUCTION

This study investigates the potentials of the matrix organisation as a form of newsroom structure to foster and facilitate cross-beat project work in legacy media. Teamwork is not new in journalism. Nevertheless, it gained increased attention in the recent discussion on the challenge of covering “wicked problems” (Rittel and Webber 1973) and complex issues in daily journalism. Practitioners and researchers, such as Jay Rosen (2012), C. W. Anderson, Emily Bell and Clay Shirky (2012) or Gideon Lichfield (2012), argue that beat-driven news coverage has reached its limits. News coverage is confronted with certain issues defining our time — climate change, the financial crisis, the refugee crisis, the drug trade and epidemics — all of which are examples of complex topics that are hard to define and even harder to tackle. As these issues are not limited to beats, their coverage should not be either: “Wicked problems are in a way a deep reflection on the limits of professional expertise” (Rosen 2012, digital source). To achieve more holistic perspectives on these topics, we need networks of experts who complement and challenge each other in terms of tracking complex issues, not just in journalism. Increasing complexity — in an organisation’s environment, in the organisation itself (size and technology) or as a task characteristic (Ford and Randolph 1992; Knight 1976;

Grochla and Norbert 1978) – belongs to the most mentioned reasons for introducing matrix organisation in organisations in different industries.

Quartz, introduced by Atlantic Media in 2012, decided to detach itself from “the phantom limbs of the newspaper creatures of old” and structured the emerging team around “an ever-evolving collection of phenomena” instead of fixed beats (Lichfield 2012, digital source). NZZ.at, the Austrian spin-off of the Swiss Neue Zürcher Zeitung and established in 2015, chose the same path: Quartz mentions “obsessions”, NZZ.at worked with “phenomena”¹. They both refer to temporary reference points, organising their team and leading their work. Instead of orienting themselves towards a management tool designed for finite paper products, they decided to focus on flexibility, intuition and specialisation.

The opportunity to put a team together from scratch unifies the two examples. Compared to legacy media, which are still struggling with the change issues that remain after the convergence processes, deciding to target such an experiment is a big advantage. It is, however, not just a question of the organisational culture and the prevailing team structures that might hinder legacy media’s possible change to new team structures (Achtenhagen and Raviola 2009): The majority of newspaper organisations still publish a daily, bundled product (whether digital or print). This product and its peculiarities (i.e. the sections) define journalists’ daily work in the newsroom.

However, confronted with the complexity of contemporary phenomena, also legacy media are experimenting with cross-beat teamwork. For Central Europe, Meier (2007) mentions the examples of the *Rheinische Post* in Düsseldorf which works with topic teams, the *Berner Zeitung* in Switzerland which dissolved the traditional beats and the *Frankfurter Rundschau* (Germany). How are these teams, used to dominant beat structures, organised? How do the involved journalists experience working in (temporary) cross-beat structures? Which advantages and which challenges can be identified?

These are the research questions that lead my study of a Swiss daily newspaper where the journalists experiment with cross-beat teamwork. In a bottom-up initiative, members of the editorial team dedicate themselves to the refugee crisis in a timely limited project by developing a series of portraits and by confronting different perspectives of the topic. The results of the case study lead to the implication that the matrix organisation is a potential form of organisational structure allowing editorial teams to maintain the department structure and simultaneously form around several ongoing tasks. Still bound to the beat structure but working in temporary topic-related project teams, journalists are confronted with dual lines of authority and responsibility – a typical characteristic of a matrix organisation (Ford and Randolph 1992). Insights from 13 interviews with journalists, producers and an external consultant provide us with an impression of where this organisation stands in the organic (not yet conscious) evolutionary process towards a matrix structure. After providing a short overview of recent changes and trends in editorial work, I compare existing findings from the field of organisation studies with the insights from this study. I close the paper with an outlook on the important decision that need to be taken to design and implement cross-beat teamwork in legacy media.

¹ The editorial team recently adapted this concept and is now working with a limited range of sections.

NEWSWORK IN A CHANGING ENVIRONMENT

Editorial Structures in Western Journalism

Work in newsrooms can be organized following different principles. In Western journalism three historical-institutional forms are distinguished (Mancini 2005; Esser and Umbricht 2013): Recent accounts differ the Anglo-American or Liberal Model from a Mediterranean/Polarized Pluralist system and the Northern European/(Democratic) Corporatist model (spanning the German-speaking, Benelux and Scandinavian countries) (Hallin and Mancini 2004; Esser and Umbricht 2013). Esser and Umbricht describe Germany and Switzerland as „typical representatives of [a liberal] corporatism“ with links to „neighbouring France and Italy and close cultural links to the Anglo-American systems“ (2013, 992) characterized by opinionated reporting (Mancini 2005).

Esser (1998) compares the functionality of German and Anglo-American newspaper offices and journalists' competencies. He differs the centralized structure with a high division of labour at British and American newspapers from German newspapers, which tend to decentralize their work, and stresses the German “holistic” understanding of journalism (379). Employees in German newsrooms have more responsibilities and perform a greater range of journalistic tasks than their Anglo-Saxon counterparts. Meier (2007) further concludes that Anglo-American newsrooms would be more process-oriented whilst newsrooms in Central Europe would place the emphasis on the beat-structure. This would in turn lead to a lack of communication between the beats in Central European newsrooms and the negligence of content that borders the beat and of complex topics (Meier 2006). Russ-Mohl questioned already in 1995, why newsrooms would not experiment more with matrix structure to overcome this weakness.

The organisation of (larger) editorial teams around beats provides editorial teams that can continuously observe society and certain subsystems, can channel these observations and can transform and process the resulting content according to the editorial objectives. Additionally, editorial structures allow outsiders to contact editorial members and to establish relationships (Jarren and Donges 2011). Not just in Switzerland, beats further help editorial teams to facilitate efficient working processes and make job differentiation possible (Becker et al. 2000). Furthermore, beats are reflected in the paper's sections, which make news comprehensive and manageable for readers.

Becker et al. (2001) however criticize the limited focus on beats as organizing structure of newsrooms. An increasingly digital and highly dynamic context force editorial managers to alter structures and processes in newsrooms to meet the changing needs and requirements (Picard 2009) and in turn lead to new organizational structures that await discovery and exploration.

Transformation of Journalistic Work

Technological innovation has transformed every step of the journalistic work process: from story idea generation, over research and sourcing, to information processing, packaging and publication (Phillips et al. 2009). Related social and economic change confront journalists with the transformation of their profession (Grubenmann and Meckel 2015), with additional skill requirements (Bakker 2014) and more service-oriented versions of journalism (Artwick 2013;

Haik 2013). Based on two empiric studies, Witschge and Nygren (2009) distinguish ten areas of change in journalistic work: (1) demands in daily work (overwork, teamwork, more desk work, information overload), (2) new opportunities for mobile work, (3) multi-skilling, (4) content management systems, (5) new formats and design, (6) constant deadlines, (7) new media logic (style, speed, user-generated content, no size limit), (8) interactivity, (9) impact of technological developments and (10) journalists' autonomy. Related uncertainty and complexity forced editorial managers to "re-examine their missions, their focus and organization, the required and available resources, and the environment in which the work is accomplished" (Gade and Sylvie 2009, 113).

Changes in newsrooms models have not only been brought by technological innovations "but also by bridging traditional barriers between [beats] and by introducing more flexible structures" (Meier 2007, 4). One of the demands in daily business, Witschge and Nygren (2009) touch on in their description, is the increase of teamwork. Interactive digital storytelling brings journalists, data analysts, interaction designers and other experts together to work on projects (Bakker 2014). This leads to further functional differentiation in newsrooms. Cross-departmental teamwork is however not new in journalism as the work of photographers, designers, illustrators and art directors belong to the major essence of every newspaper – print or digital. Schierhorn, Endres and Schierhorn already published a study on the increase of teamwork in newsrooms in 2001. Despite the widespread introduction of teamwork in other industries and the existence of some research into editorial teamwork published between 1993 and 1997 (Buck 1993; Stepp 1995; Graham and Thompson 1997; Hansen, Neuzil, and Ward 1997; Russial 1997), the authors had to admit that "the concept of a newsroom organized around teams [has] only recently [...] been accepted on some newspapers" (2). The survey of 192 U.S. newspapers with more than 25,000 daily circulation provides positive feedback on the use of some form of teamwork and shows rapid growth in it in the 1990s. To produce stories more relevant to readers was the most important reason for the respondents to switch to teamwork. Back then, "relatively few of the editors reported using broad, theme-based, inter-beat approaches to coverage" (13). Most teams were formed around topics interchangeable with the beat assignments in the newsrooms or as an ad hoc group of reporters, editors and designers. In a more recent study from 2015, Lischka investigates the influence of multi-platform newsroom features (e.g. central news desks) and innovative values on the implementation of cross-beat working procedures. The survey of 47 Swiss business journalists who work in print and online showed that cross-beat collaboration doesn't depend on innovative values the questioned journalists agree to, structural newsroom features or socio-demographic characteristic. The author assumes that the cross-sectional nature of business journalism topics might influence these results. She concludes that newsroom structure plays an important role in fostering innovative behaviour but that not all architectural newsroom features would be effective. Only "features directly requiring changes in working procedures, such as being responsible for multi-channel reporting, [would be] efficient for overcoming routine rigidity" (25). The results of Lischka's study are an interesting complement to this case study in which cross-beat teamwork emerged from journalists' own initiative. Furthermore, the results show how the existing newsroom structures even hinder journalists' cross-beat teamwork.

Cross-Beat Teamwork and Complex Phenomena

In 2012, various authors pointed out newspaper journalism's increasing difficulties with covering complex topics in a globalised world and with adapting newsroom structures accordingly (Rosen 2012; Lichfield 2012; Anderson, Bell, and Shirky 2012). Contemporary issues can be hard to define and affect many stakeholders who have their own frames and interests when dealing with these issues. And these issues are inter-connected. Separating them is hardly possible (Rosen 2012). These requirements ask a lot from editorial teams with established beat structures and from journalists who are rather used to autonomy and independent working.

However, there are editorial teams experimenting with innovative working formats. This study investigates a relevant case in Switzerland. I interviewed journalists on the opportunities and challenges they had perceived in a recent project. The insights from these interviews indicate that the subsequent introduction of cross-beat teamwork for news coverage would lead to a matrix organisation in the newsroom. To discuss these findings, I first provide a brief overview of the most important insights from research into the matrix organisation in the field of organisation studies. The subsequent discussion builds on this state of knowledge.

The literature overview shows, that teamwork in journalism has bothered journalism studies before. Even though different forms all seem to be the result of increased internal and/or external complexity in journalism, it is important to distinguish between different types of teamwork: *topic-teams*, Schierhorn et al. came across in 2001, appeared the authors to be similar to the beat assignments in the newsroom (no inter-beat approach). *Cross-departmental* or *cross-functional* teamwork, as the collaboration between journalists, photographers, designers, or programmers, emerges from converged newsrooms and is being discussed in this context (see Parasie and Dagiral 2013; Lewis and Westlund 2015 or Lewis and Usher 2013). *Cross-beat* teamwork describes the collaboration between journalists from different beats on a shared topic. However, in converged newsrooms teams can be cross-beat and cross-functional at the same time – as it was the case in this study. The analysis focuses on the characteristics of cross-beat newswork but strives to integrate the impressions of members of functional departments.

MATRIX ORGANISATION

Developed in the 1960s to meet the needs of the aerospace industry (Larson and Gobeli 1987), the term matrix organisation refers to a type of cross-functional organisation that brings “people together from two or more usually separated organizational functional areas to undertake a task on either a temporary basis (as in a project team) or on a relatively permanent basis” (Ford and Randolph 1992, 269). We find matrix structures mostly in organisations where people work on projects (Knight 1976) but also in a wide range of other industries and business areas, including marketing, financial, and international organisations (Davis and Lawrence 1978). In matrix organisation, an additional dimension, typically consisting of projects, business areas and products, overlies the traditional functional hierarchy. The overlay adds lateral authority, influence and communication. The resulting dual

lines of authority and responsibility violate management's traditional accountability principles (Knight 1976; Galbraith 1971; Ford and Randolph 1992).

Different Forms of Matrix Organisation

In the literature, the terms matrix organisation and project organisation (and related concepts) are frequently interchanged and not clearly distinguished. Both refer to some type of cross-functional organisation. Further, project work is a major motivation to change traditional forms of organisation to matrix organisation. The time element is key to our (terminological) understanding of the organisation form: Projects have deadlines, definable costs and standards within that time frame (Ford and Randolph 1992), with functional managers not being formally involved (Larson and Gobeli 1987). Project organisations are an extension of project management, and they come into play when an organisation finds itself continually managing multiple projects. The distinction between a matrix and a project organisation is that project structures form around specific *finite* tasks, whereas matrix structures tend to form around *ongoing* tasks (Ford and Randolph 1992).

Larson and Gobeli (1987) define three forms of matrix organisation: functional, balanced, and project. Functional managers' authority decreases from the functional, over the balanced, to the project form. The project form is considered the most effective and managers concerned with the development of new products and services prefer it. According to Larson and Gobeli (1987), most criticism of matrix management is aimed at the balanced and the functional forms. Some researchers describe the evolution of matrix structures as a developing process (Lawrence and Davis 1977; Galbraith 1971; Kolodny 1979) covering five stages: (1) a traditional/functional hierarchy, (2) a temporary project overlain by a dominant functional hierarchy, (3) a permanent project overlain/functional matrix organisation, (4) a mature/balanced matrix organisation, and (5) going beyond matrix/unique forms. An organisation may stop its evolution or interrupt it at any point, depending on its particular situation and related needs.

Reasons for Introducing Matrix Organisation and Evaluation

Different reasons may lead to the introduction of matrix structures or an evolution in this direction. Authors differentiate between the following factors:

- *Characteristics of the organisation's environment*: the complexity, diversity, rate of change and uncertainty (Ford and Randolph 1992)
- *Characteristic of the organisation*: the increased complexity (size and technology) (Knight 1976)
- *Task characteristics*: the duration, complexity, degree of novelty, urgency, degree of risk and importance (Grochla and Norbert 1978)
- *Motivational and ideological reasons*: the "humane, participative and flexible forms of organization" (Knight 1976, 118)

In their review and summary of the existing literature on cross-functional organisation forms published since 1976, Ford and Randolph list the main advantages and disadvantages (1992) (see Table 1).

Insert Table 1 about here

Comparing the advantages and disadvantages of matrix organisation as discussed in the literature (Knight 1976; Lawrence and Davis 1977; Ford and Randolph 1992; Sy and D'Annunzio 2005), we recognize that they do not differ much from one another, but are often contradictory perspectives of the same aspect. In matrix organisations, we combine multiple dimensions of responsibility and, thus, different perspectives on the existing alternatives. This setting forces the involved parties to compromise and may have diametrically opposed sets of costs and benefits (Knight 1976). Further, the emphasis on organisational culture and on the importance of leadership competences are noteworthy (Morrison, Brown, and Smit 2006). Implementing a matrix organisation is a complex process, involving more than just changing the organisational structure and hierarchy system: It is largely about culture and communication as well as changing behaviours over time (Lawrence and Davis 1977; Kolodny 1979). According to Lawrence and Davis (1977), implementing a matrix organisation has to be a serious, top-level decision requiring commitment to a thorough transformation.

THE STUDY

In a next step, I compare these general findings and evaluations with empirical data from my study. Does the matrix organisation fit the needs of emerging cross-beat teamwork in newsrooms? How did the interviewed journalists perceive cross-beat teamwork considering potentials and challenges?

To learn more about journalists' experiences with phenomenon-focused working formats, I undertook a case study on a major Swiss daily newspaper. The general interest paper introduced its online brand in 1997. In a convergence process starting in 2012, the two teams were merged into one, which currently comprises 221 journalists and 24 producers (as art directors, photographers and interactive designers; full and part-time positions) structured into 10 beats (i.e. international, national, local, economics, feuilleton, sports, opinion, science, panorama, mobile/digital/travel) and 7 departments (data team, reporters, interactive designers, art directors, photo editors, photographers and the news desk). The beats in particular enjoy far-reaching autonomy and comprise journalists' extensive topic responsibility and corresponding expertise.

The starting point for my inquiries was an editorial team member's (interviewee 6) bottom-up initiative to cover the refugee crisis from a cross-beat perspective. I talked to four journalists and one producer involved in the emerging project, which resulted in a portrait series published over several weeks in different sections of the paper. The involved journalists belong to different beats (international, national and local), but share the topic responsibility "refugees".

When I interviewed these journalists, they recommended additional editorial team members who were not involved in the project, but were experienced in cross-beat teamwork from other (prior) projects. Based on this recommendation system, the data set increased organically. I also had the opportunity to talk to an external consultant involved in the organisation at that time with extensive experience in digital journalism. I reached (preliminary) data saturation after 13 interviews (7 journalists, 2 data editors, 1 interactive designer, 1 photo editor, 1 art director and 1 affiliated expert).

In semi-structured interviews we talked about the interviewee's experience with cross-beat teamwork, how and in which context the corresponding project(s) emerged, about the challenges, advantages and the potentials she/he sees arising from this form of newswork based on her/his personal experience. Each interview lasted between 33 and 102 minutes. The interviews were taped and transcribed.

The data was analysed applying thematic analysis (Braun and Clarke 2006). In an inductive way journalists' experiences with cross-beat teamwork have been analysed. After the identification of latent themes, I discussed these first results in a workshop among colleagues researching into information management. Discussing the data and the identified codes and themes, we derived the thesis that newsrooms, as the case at hand, which work periodically with cross-beat project teams, might develop towards matrix organization. The colleagues described the identified themes as typical indication for the evolution of organizations in complex environments. Based on the results of this discussion, I went back into the data and compared it to existing insights into matrix organization from organizational studies. In an iterative process I compared the named advantages and disadvantages of matrix organization with my data.

In the following I will integrate the results of this iterative process and present it in the results section: I discuss journalists' experiences with this work format by relating it to the advantages and disadvantages of matrix organisation as compiled by Ford and Randolph (1992). Based on this analysis, I consider the question if the formation of a matrix structure in this (and other) situation(s) appears justifiable. In a last section, I develop recommendations for the implementation of a matrix organisation in legacy media's newsrooms.

FINDINGS

Advantages of Matrix Organisation in Newsrooms

With more than 200 full and part-time journalists, this news organisation has to rely on its departments' autonomy. Instead of a daily editorial meeting with the whole team, the managing editors of the departments meet several times a day to coordinate the workflows and keep the desk editors, (info) graphic designers and photo editors informed. These meetings are, however, more an exchange of information than collective sense making. The managing editors inform their colleagues about topics/events that their department's journalists are covering.

"[...] I don't know if you know our editorial meetings – that's just the addition of "we do this" and "we do that" and the others stating "we do this" [...] Friday we have the the department editors' meeting, the weekly one where they plan the upcoming week. But even there, you can't find a debate where [name of the department editor national] and [name of the department editor international] would say: Hey, let's do this together!" (interviewee 2, line 180ff.).

If the managing editors identify overlaps, each department informs its responsible journalist. The concerned journalists themselves then decide who is going to cover the

topic/event. These journalists do exchange views about the event/its interpretation, but, in principle, the interpretation in each of their articles is the monopoly of that specific journalist. For example, the coverage of the refugee crisis was divided into the different beats' perspectives (those of the journalists in charge of this particular beat). Confronted with the increased examination of the refugee crisis, one journalist (interviewee 6) questioned the resulting fragmentation of the topic coverage and the lacking integration of existing expertise. Even though this initiative was a limited project with the involved journalists exchanging information mainly in the project's first part, the involved journalists recognised the potential of an ongoing expert group discussing the topic, combining different perspectives and linking the existing expertise. Moreover, several interviewees also saw the potential of cross-beat teamwork for short-term, event-driven coverage during, for example, disasters. They mentioned the Charlie Hebdo attack and different plane crashes as examples of such disasters.

Communication Frequency. The interviewed journalists recognised the need for an increase in the frequency of communication in order to realise cross-beat teamwork. However, since working in project teams and keeping various people informed (without relying on a daily beat meeting) is a new way of working for these journalists: they perceived it as a burden rather than an advantage in its current form.

Linking existing expertise. In large editorial teams, as in the case study, eclectic expertise is available, but difficult to link. The interviewed journalists found it extremely difficult to obtain an overview of the expertise, especially that outside their beat. In the example, the initialising journalist had to search for colleagues with suitable expertise, which he did by questioning the relevant department editors. Referring to another example, interviewee 3 mentioned her colleagues', who have the same beat responsibility at other beats, refusal to collaborate. This in her eyes leads to inefficient working processes and to redundancies.

"And then I started to inquire: the topic touches the national beat, travel and leisure, possibly also tourism and panorama. And so I contacted everyone and asked who would be interested to join me. It turned out that they were already planning an insert with a focus on travel and leisure" (interviewee 1, line 136ff.).

The journalists involved in the refugee project agreed on the potentials of long-term collaboration between them. However, they were aware of the increased coordination and communication costs of such working formats and perceived these as, to some extent, in conflict with their daily duties (these journalists are in charge of multiple beats).

Flexible use of resources. The case study demonstrates the potential for the flexible use of journalists' expertise between the beats and project teams: The journalists involved in the refugee project divided their personal resources between the project and their beat. Knight calls this system "fall back" (1976, 114): Journalists' core affiliation would probably still be to the beat in order to remain informed and meet other obligations. Whenever project work is interrupted, completed or does not require journalists full resources, the (remaining) resources are returned to/remain in the beat.

Motivation and autonomy. The journalist who produced the idea for the refugee project (interviewee 6) was highly motivated, appreciating the opportunity to use his initiative. He

described the experience as “inspirational”. He further affirmed his willingness to start another initiative, as he was happy with the previous project’s outcome. Inspired by this example, the other involved journalists also affirmed their readiness to initialise a cross-beat project and to extend first experiences.

“And I would argue for, as this was like something new we experimented with, that next time we try to benefit from the learning. I would actually make sense, to start something new with the same team” (interviewee 9, line 352ff.).

Interviewee 8 described the teamwork as “mind opening” in a cultural sense. Interviewee 9 called the collaboration “efficient”, while interviewee 3 was sure that more journalists would be ready for cross-beat teamwork. However, teamwork, coordination, and decision making in the group in particular, were unfamiliar to the involved journalists. 3 out of 7 interviewed journalists described the project work as laborious.

Additional potentials. Interviewee 7 criticised the limited use of journalists’ extensive knowledge. Most papers’ editorial teams only benefit from their journalists’ beat-related expertise. However, general knowledge papers, as in the cast study, could benefit from journalists’ additional skills: their language competences, family affiliation or hobbies. If they can make these competences visible and accessible, they provide the editorial team with useful resources. The interviewee suggested using a tagging system to capture as many competences as possible and to make them visible and accessible.

“Every employee gets tagged and these tags are not limited to one beat nor are they limited to my usual beat. I might have a personal relation to a topic or I might be married to someone who has a different cultural background. Or maybe I studied something I am currently not writing about – we might think of several links based on knowledge or experience, contacts and so on. We should really make use of it” (interviewee 7, line 50ff.).

Interviewee 7 mentioned another interesting argument: Readers’ current dependency on a single journalist’s interpretation of a certain beat. News coverage that depends on cross-beat teamwork would end this limitation – especially if the result of collaboration is regarded as more than the simple addition of perspectives and expertise in the form of new ideas and arguments (which the refugee project journalists affirmed).

The Challenges of Matrix Organisation in Newsrooms

Costs and resources. The distribution of costs, resources and benefits has been identified as one of the cross-beat projects’ main challenges: The department editors are only ready to invest departmental resources if they benefit from the project outcomes, particularly from click rates. This argumentation seems to prioritise managerial rather than editorial arguments and is related to persisting section structures (and related thinking) in the paper’s news products (digital and print). One of the interviewed journalists, a member of the reporter team (interviewee 11), described these challenges as similar to those he encountered in reportage projects.

Resources and workflows. The interviewees agreed that the editorial team acknowledged the importance of urgent short-term (i.e. disaster coverage), mid-term (i.e. event coverage), and long-term (i.e. issue coverage) cross-beat exchange and teamwork, but mentioned that the corresponding initialisation procedures, the allocation of resources and workflows had not yet been sufficiently defined. Who had the competence to initialise and assemble cross-beat teams remained unclear, as the department editors enjoy far-reaching autonomy over their resources.

“Every beat works for itself. And in the newspaper, if something appears coordinated it is by chance. There are only ... people have their difficulties to come out of this beat-mill” (interviewee 13, line 41ff.).

I discussed the question of who should be in charge of releasing cross-beat teamwork’s publishable outcomes without undermining the editors’ authority in greater detail with interviewee 13. This issue seems to be more a question of organisational culture than of competences: There is no doubt that the editor-in-chief would be in charge of this decision, but the beats and their editors enjoy far-reaching autonomy due to liberal values this organization commits itself to.

Another challenge that the refugee project journalists identified was that of project management: Since the journalists who share their beat responsibility are on the same hierarchical level, giving one of them management competences remains a case-to-case decision. In the case study, the journalist who initialised the project adopted the function. Two of the other team members (interviewees 8 and 12) supported him in certain areas: They described making a decision in a smaller sub-group as necessary to guarantee the project’s progress.

“We had so many meeting – in my eyes too many. [...] and then, it was around Christmas, [name of interviewee 6] and me agreed to just start. And then – I think [name of interviewee 8] also joined us – in the end we were just three people who really ... We defined the cadence, the list of topics, [...] we defined the most important basic points” (interviewee 12, line 22ff.)

Conflicts in teams. The editorial team members involved in the refugee project observed difficulties in their collaboration due to their different perspectives on work and their goals, but most of them did not perceive these as a major challenge. Only two team members (interviewees 6 and 12) identified some members’ enthusiasm to create an ambitious digital publication as too demanding and not in line with the rest of the group’s ambitions. Aware of appropriate techniques, interviewee 3 described writing articles in teams as a challenge if the authors are not used to this way of working.

Coordination and information processing. The conducted interviews affirm the need for increased information processing, for more meetings and the need for adapted decision-making processes.

“[...] I remember situations in which I thought, “this just takes too much time” ... to write more and more e-mails and things that made me worry that this can’t be our daily business in the future because administrative stuff and these meetings would cost us too many resources [...]” (interviewee 6, line 259ff.).

Role ambiguity, role conflict and stress. Two of the interviewed refugee project journalists (interviewees 6 and 9) experienced role stress and work overload, because the project work demanded an unfamiliar and extensive time investment, particularly from the project manager. Role stress is known as a potential negative side effect of matrix organisation in organisation studies. Results are, however, contradictory as discussed in Joyce (1986). The department editors assume an important role by coordinating the resources and mitigating the journalists’ workload, especially if there are conflicts between a journalist’s cross-beat work and his/her other beat responsibilities. Further experience should reveal how the beats deal with conflicts if extensive project work (i.e. a peaks in this) keeps journalists from duties arising from other beat responsibilities.

Multinational issues. Guterl (1989) describes the matrix structure’s inability to respond quickly enough to rapidly changing multinational environments, due to bureaucratic reasons, as a disadvantage. In newsrooms, establishing an additional responsibility dimension seems to have the opposite effect: The flexibility to react to a complex global environment seems to increase. However, this flexibility depends on the defined initiating procedures and the assigned competences as the following quote of interviewee 2 indicates:

“Actually, we would have to admit: Hey, okay, we just realized that we missed some big stories as the Snowden Files – we totally overslept this – because the international department thought this is too political, the national team thought he’s just some foreigner [laughing] and the digital guy did something but claimed that he can’t carry the whole story by himself. [...] We just overslept this because anyone was ... everyone recognized: This is a big story! But anyone was in charge” (interviewee 2, line 155ff.)

CONCLUSION

Is it justifiable to introduce a matrix structure for event-driven disaster coverage or for limited projects such as the portraits series in the case study? The answer is a resounding “no”. Project structures can only organise a limited number of projects, whereas matrix structures form around *multiple ongoing* tasks (Ford and Randolph 1992). The introduction of a matrix structure is therefore only justifiable if the editorial team decides to permanently track multiple issues with a cross-beat perspective. This does not mean that emerging teams need to be unlimited or of a certain duration. Each issue is different and so would corresponding beats be. The difficulty of defining where a topic starts and where or when it ends implies that an undefined or uncertain life span would probably characterise most cross-beat projects. The peculiarity that solutions for complex topics are particularly hard to find and are often only temporary argues for long-term life spans rather than short-term ones. Establishing

corresponding beats provides editorial teams with the potential for individual agenda setting, user guidance and brand positioning.

The need to introduce a matrix organisation in newsrooms applies to larger teams rather than small ones. All the interviewees except one agreed that giving up the department structure does not seem a realistic option for an editorial team of around 200 people. The only exception (interviewee 7) thought that if a long-term perspective was taken, even big teams would result in a purely phenomenon-based organisation. Those who believe it is necessary to maintain the department structure are convinced of its management function (reducing complexity for daily, general interest papers). An additional argument forwarded for general interest papers to maintain the department structure is their objective to provide users with an overall update. However, if every event had to be related to a range of defined phenomena, these might become too big, indistinct or too numerous.

Cross-beat teamwork has the potential to link the existing expertise in editorial teams and to increase its technical excellence, particularly if a long-term perspective is taken. And team members learn from one another. Even though cross-beat, topic-focused work initially means an additional workload for the journalists involved, it mainly means changing the work procedures. Taking a long-term perspective, the workload should be balanced, because journalists and the beats do invest more resources in certain topics, but also benefit from the cross-beat team's related work. I can further see the potential to enable the teams to handle increasing amounts of information and to deal better with complexity. Taking a mid- or long-term perspective should provide these journalists with some scope to compensate for the increased coordination and communication costs. We, however, need more experience to learn more about the distribution of the workload and its effect on the coverage quality. And we should give these working formats and adequate techniques time to emerge. The journalists should not be immediately confronted with requirements that they can hardly fulfil, as this might lead to reluctance to collaborate.

OUTLOOK

Only a convincing editorial decision should lead to more cross-beat topic-focused newswork. A matrix organisation is a structuring instrument that can deal with the resulting complexity. In the example at hand, cross-beat newswork is a rather intuitively emerging work form resulting in the lack of certain fundamental managerial decisions, which hinders the journalists' work. However, this case's peculiarities help us identify the lacking decisions and crucial design elements that facilitate cross-beat newswork and establish matrix structures.

Conscious Design of Cross-beat Newswork

If we see the evolution of a matrix organisation as a developing process with five stages, the newsroom in the case study is in the second stage when temporary project overlays emerge under a predominantly functional hierarchy. An important next step for the interviewed journalists gaining experience with cross-beat projects would be to define responsibilities and assign competences, and to learn to maintain a communication flow. The interviewed journalists mentioned that many of the editorial team members were aware of these necessities in principle, but that anyone would take matters into their hands. In practice,

the definition of the following responsibilities and assignment of competences are required. Based on the insights from the interviews, it appears to make sense to differentiate between urgent, short-term cross-beat news coverage (we might call the corresponding teams *task forces*) and mid- or long-term cross-beat *topic beats*.

- Who is responsible and has the competency to initialise *task forces*?
- Who is responsible for the project management in *task forces*: A team member, the editor-in-chief or his/her deputy? Or should both positions be established?
- Who has the competency to publish *task force* outputs?
- Who is responsible for and has the competency to initialise *topic beats*?
- Who is responsible for project management in *topic beats*? How is this responsibility defined?
- Who has the competency to publish *topic beats* outputs?
- Where should cross-beat coverage be published?

It seems to make sense to establish central competences for task forces to guarantee quick reaction. The editor-in-chief or his/her deputy should therefore be in charge. The editors should not only define topic beats' process as a crucial editorial agenda setting and positioning element, but should also discuss the allocation of resources and competences.

The question of where to publish cross-beat coverage is important, as it extends change to additional journalism dimensions. The journalistic product connects user interaction and navigation to the internal organisation, as the newsroom's beat structure is reflected in the paper's section structure and vice versa. Interim adaptations to the product (i.e. to define topic-related sections, at least online) are conceivable, but should not replace basic strategic reflections. The interviewed journalists did not agree regarding whether the sections should be abandoned with the paper's increasing focus on digital news coverage. They agreed that this question is strongly related to user navigation in the digital age. Additionally, section-based publishing fosters beat-specific cost and benefit thinking, which, as the interviews revealed, hinders cross-beat teamwork. At this point, the editorial and controlling arguments are in conflict and we return to the importance of a convinced editorial decision, which should be the starting point for these change processes.

Beside these decisions about the competences and responsibilities, I identified two additional areas that need to be discussed and designed:

- Which channels and/or platforms best suit and guarantee communication flow in and across teams?
- How can journalists be protected from potential role conflicts arising from phenomenon beat(s) and other department duties' conflicting requirements?

Cultural Issues

The reallocation of competences and the creation of new ones as well as the distribution of power seem to be largely a cultural question – not just in journalism. Morrison, Brown and Smit's 2006 study strengthens the assumption that organisational culture is indeed a relevant influence on the project management in a matrix organisation. These scholars' study

concludes that the project management literature has not produced a comprehensive and theoretically derived culture framework for empirical analysis. This situation has not changed much since then. Palt's (2013) criticism is that, in management sciences, the scientific discourse on matrix organisations ended at the end of the 1980s. She stresses the importance of further research into the relevance of leadership style and a project manager's personality, which other scholars also did (Barlett and Ghoshal 1989; Lawrence and Davis 1977).

In the case study at hand, the cultural value autonomy influences the emergence of a matrix structure in two different ways: On the department level, it has a hindering effect, because department editors are not keen on giving away some of their power. A challenge well known in organizational studies (Davis and Lawrence 1978): Considerations of potential loss of status, authority and control can result in resistance and opposition. On the journalist level, autonomy allows individual initiatives in respect of cross-beat projects, such as the mentioned refugee example at hand, as long as such initiatives are low on resource requirements and do not challenge the publication principles. Such social factors have to be considered when implementing a matrix organisation. Knight (1976) stresses that working in cross-functional teams should not mean that employees become downgraded. We have been familiar with such issues since the beginnings of digital journalism when two-tier culture characterised some newsrooms and online journalists were regarded of minor value (Grubenmann and Meckel 2015). To avoid such cultural developments, editorial management should frame working in task forces and phenomenon beats, whether voluntarily or not, as valuable and ground-breaking work.

LIMITATIONS AND FUTURE RESEARCH

Certain peculiarities of this study, such as the size of the editorial team, the general knowledge focus and the power distribution between the editor-in-chief and the department editors, decrease the generalizability of its findings. However, it can still serve as an example of an editorial team experimenting with cross-beat newswork due to its confrontation with an increasingly complex environment. The findings indicate that this industry might be the next to introduce a matrix organisation in order to systematise ongoing multilayer project work. The study results point to crucial questions of design that need to be considered. Beside experiences with different forms of competence assignment, we have to learn more about the effect of cross-beat newswork on journalists' perceived autonomy, workload and role conflicts to derive design implications. We moreover need studies that investigate cross-beat newswork's effects on the resulting news coverage and the related user experience. The work of Quartz and NZZ.at are examples that can be readily examined.

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REFERENCES

- Achtenhagen, Leona, and Elena Raviola. 2009. "Balancing Tensions During Convergence: Duality Management in a Newspaper Company." *International Journal on Media Management* 11 (1): 32–41. doi:10.1080/14241270802518505.
- Anderson, Christopher W., Emily Bell, and Clay Shirky. 2012. "Post-Industrial Journalism: Adapting to the Present." New York. <http://towcenter.org/research/post-industrial-journalism/>.
- Artwick, Claudette G. 2013. "Reporters On Twitter." *Digital Journalism* 1 (2): 212–28. doi:10.1080/21670811.2012.744555.
- Bakker, Piet. 2014. "Mr. Gates Returns: Curation, Community Management and Other New Roles for Journalists." *Journalism Studies* 15 (5): 596–606. doi:10.1080/1461670X.2014.901783.
- Barker, Jeffrey, Dean Tjosvold, and Robert I. Andrews. 1988. "Conflict Approaches of Effective and Ineffective Project Managers: A Field Study in a Matrix Organization." *Journal of Management Studies*, 25 (2): 167–78.
- Barlett, Christopher A., and Sumantra Ghoshal. 1989. "Matrix Management: Not a Structure, a Frame of Mind." *Harvard Business Review* 68 (4): 138–45.
- Becker, Lee B., Wilson Lowrey, Dane S. Claussen, and William B. Anderson. 2000. "Why Does the Beat Go on? An Examination of the Role of Beat Structure in the Newsroom." *Newspaper Research Journal* 21 (3): 2–16.
- Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101. doi:10.1191/1478088706qp063oa.
- Buck, Ryan. 1993. "The Maestro Concept: A New Approach to Writing and Editing for the Newspaper of the Future."
- Davis, Stanley M., and Paul R. Lawrence. 1978. "Problems of Matrix Organizations." *Harvard Business Review* 56 (3): 131–42.
- Denis, Helene. 1986a. "Is the Matrix Organization a Cumbersome Structure for Engineering Projects." *Project Management Journal* 17 (1): 49–55.
- Denis, Helene. 1986b. "Matrix Structures, Quality of Working Life, and Engineering Productivity." *IEEE Transactions on Engineering Management* 33 (3): 148–56.
- Dill, David D., and Alan W. Pearson. 1984. "The Effectiveness of Project Managers: Implications of a Political Model of Influence." *IEEE Transactions on Engineering Management* 31 (3): 138–46.

- DiMarco, Nicholas J., Jane R. Goodson, and Henry F. Houser. 1989. "Situational Leadership in a Project/Matrix Environment." *Project Management Journal* 20 (1): 11–18.
- Esser, F. 1998. "Editorial Structures and Work Principles in British and German Newsrooms." *European Journal of Communication* 13 (3): 375–405. doi:10.1177/0267323198013003004.
- Esser, F., and A. Umbricht. 2013. "Competing Models of Journalism? Political Affairs Coverage in US, British, German, Swiss, French and Italian Newspapers." *Journalism* 14 (8): 989–1007. doi:10.1177/1464884913482551.
- Ford, Robert C., and W. Alan Randolph. 1992. "Cross-Functional Structures: A Review and Integration of Matrix Organization and Project Management." *Journal of Management* 18 (2): 267–94.
- Gade, Peter J., and George Sylvie. 2009. "Changes in News Work: Implications for Newsroom Managers." *Journal of Media Business Studies* 6 (1): 113–48.
- Galbraith, Jay R. 1971. "Matrix Organization Designs. How to Combine Functional and Project Forms." *Business Horizons* 14 (1): 29–40.
- Graham, Gary, and Tracy Thompson. 1997. *Inside Newsroom Teams: An Editor's Guide to the Promise and Problems*. Evanston (Illinois): NMC.
- Greiner, Larry E., and Virginia E. Schein. 1980. "The Paradox of Managing a Project-Oriented Matrix: Establishing Coherence within Chaos." *Sloan Management Review* 2 (2): 17–22.
- Grochla, Erwin, and Thom Norbert. 1978. "Die Matrix-Organisation. Chancen und Risiken einer anspruchsvollen Strukturierungskonzeption [Matrix Organization. Chances and Risks of a Demanding Structuring Conception]." In *Betriebswirtschaftliches Kontaktstudium*, 41–51. Wiesbaden: Betriebswirtschaftlicher Verlag Dr. Th. Gabler KG.
- Grubenmann, Stephanie, and Miriam Meckel. 2015. "Journalists' Professional Identity. A Resource to Cope with Change in the Industry?" *Journalism Studies* (digital publication): 1–17. doi:10.1080/1461670X.2015.1087812.
- Guterl, Fred V. 1989. "Goodbye Old Matrix." *Dun's Business Month* 133 (February): 32–38.
- Haik, Cory. 2013. "Adaptive Journalism." *Cory Haik's Tumblr-Account*. <http://coryhaik.tumblr.com/post/49802508964/adaptive-journalism>
- Hallin, Daniel C., and Paolo Mancini. 2004. *Comparing Media Systems: Three Models of Media and Politics*. New York: Cambridge University Press.
- Hansen, Kathleen A., Mark Neuzil, and Jean Ward. 1997. "Newsroom Topic Teams: Journalists' Assessments of Effects on News Routines and Newspaper Quality" *Paper Presented at the AEJMC Chicago, August*.

- Jarren, Otfried, and Patrick Donges. 2011. *Politische Kommunikation in der Mediengesellschaft. Eine Einführung [Political Communication in the Media Society. An Introduction]*. Third edit. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Jerkovsky, William. 1983. "Functional Management in Matrix Organizations." *IEEE Transactions on Engineering Management* 30 (2): 89–97.
- Joyce, W. F. 1986. "Matrix Organization: A Social Experiment." *Academy of Management Journal* 29 (3): 536–61. doi:10.2307/256223.
- Katz, Ralph, and Thomas J. Allen. 1985. "Project Performance and the Locus of Influence in the R&D Matrix." *Academy of Management Journal* 28 (1): 67–87.
- Kerzner, Harold R. 1984. *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*. New York: Van Nostrand Reinhold.
- Knight, Kenneth. 1976. "Matrix Organization: A Review." *The Journal of Management Studies* 17 (2): 111–30.
- Kolodny, H. F. 1979. "Evolution to a Matrix Organization." *Academy of Management Review*. doi:10.5465/AMR.1979.4498362.
- Kur, C. Edward. 1982. "Making Matrix Management Work." *Supervisory Management* 21 (3): 37–43.
- Larson, Erik W., and David H. Gobeli. 1987. "Matrix Management: Contradictions and Insights." *California Management Review* XXIX (4): 126–38. doi:10.2307/41162135.
- Lawrence, Paul R., and Stanley M. Davis. 1977. *Matrix*. Massachusetts: Addison-Wesley.
- Lewis, Seth C., and Nikki Usher. 2013. "Open Source and Journalism: Toward New Frameworks for Imagining News Innovation." *Media, Culture & Society* 35 (5): 602–19. doi:10.1177/0163443713485494.
- Lewis, Seth C., and Oscar Westlund. 2015. "Actors, Actants, Audiences, and Activities in Cross-Media News Work." *Digital Journalism* 3 (1): 19–37. doi:10.1080/21670811.2014.927986.
- Lichfield, Gideon. 2012. "On Elephants, Obsessions and Wicked Problems: A New Phenomenology of News." *News Thing*, September. <http://newsthing.net/2012/09/16/quartz-obsessions-phenomenology-of-news/>.
- Mancini, Paolo. 2005. "Is There a European Model of Journalism?" In *Making Journalists: Diverse Models, Global Issues*, edited by Hugo de Burgh, 77–93. London: Routledge.
- Massing, Michael. 2015. "Digital Journalism: The Next Generation." *The New York Review of Books*. <http://www.nybooks.com/articles/archives/2015/jun/25/digital-journalism-next-generation/>.

- Meier, Klaus. 2006. "Newsroom, Newsdesk, crossmediales Arbeiten. Neue Modelle der Redaktionsorganisation und ihre Auswirkungen auf die journalistische Qualität [Newsroom, Newsdesk, Convergence. New Models of Editorial Organization and Their Impact on Journalistic Quality]." In *Medien-Qualitäten. Öffentliche Kommunikation zwischen ökonomischem Kalkül und Sozialverantwortung [Media Qualities. Public Communication between Economic Calculation and Social Responsibility]*, edited by Siegfried Weischenberg, Wiebke Loosen, and Michael Beuthner, 203–22. Konstanz: UVK.
- Meier, Klaus. 2007. "Innovations in Central European Newsrooms." *Journalism Practice* 1 (1): 4–19. doi:10.1080/17512780601078803.
- Meredith, Jack R., and Samuel J. Mantel Jr. 1989. *Project Management*. 2nd. Editi. New York: John Wiley.
- Morrison, John M., Chris J. Brown, and Eon M. Smit. 2006. "A Supportive Organisational Culture for Project Management in Matrix Organisations: A Theoretical Perspective." *South African Journal of Business Management* 37 (4): 39–54.
- Palt, Beatrix. 2013. "Partizipation und Führung in der Matrix-Organisation [Participation and Leadership in the Matrix Organization]." In *Organisation und Partizipation. Beiträge der Kommission Organisationspädagogik*, edited by Susanne Maria Weber, Michael Göhlich, Andreas Schröer, Hildegard Macha, and Claudia Fahrenwald, 229–37. Wiesbaden: VS Verlag für Sozialwissenschaften. doi:10.1007/978-3-658-00450-7.
- Parasie, Sylvain, and Eric Dagiral. 2013. "Data-Driven Journalism and the Public Good: 'Computer-Assisted-Reporters' and 'Programmer-Journalists' in Chicago." *New Media & Society* 15 (6): 853–71. doi:10.1177/1461444812463345.
- Phillips, Angela, Jane B. Singer, Tudor Vlad, and Lee B. Becker. 2009. "Implications of Technological Change for Journalists' Tasks and Skills." *Journal of Media Business Studies* 6 (1): 61–85. doi:10.1080/16522354.2009.11073479.
- Picard, Robert G. 2009. "Introduction: Changing Structures and Organization of Newsrooms." *Journal of Media Business Studies* 6 (1): 1–6.
- Pitts, Robert A., and John A. Daniels. 1984. "Aftermath of the Matrix Mania." *Columbia Journal of World Business* 19 (2): 48–54.
- Posner, Barry Z. 1986. "Whats All the Fighting About Conflicts in Project-Management." *IEEE Transactions on Engineering Management* 33 (4): 207–11.
- Randolph, W. Alan, and Barry Z. Posner. 1992. *Getting the Job Done: Managing Project Teams and Task Forces for Success*. Englewood Cliffs, NJ: Prentice-Hall.
- Rittel, Horst W. J., and Melvin M. Webber. 1973. "Dilemmas in a General Theory of Planning." *Policy Sciences* 4 (December): 155–69.

- Rosen, Jay. 2012. "Covering Wicked Problems." *Jay Rosen's Press Think*. <http://pressthink.org/2012/06/covering-wicked-problems/#p4>.
- Russ-Mohl, Stephan. 1995. "Redaktionelles Marketing und Management [Editorial Marketing and Management]." In *Medien und Journalismus 2 [Media and Journalism 2]*, edited by Otfried Jarren, 103–38. Opladen: Westdeutscher Verlag.
- Russial, John T. 1997. "Topic-Team Performance: A Content Study." *Newspaper Research Journal* 18 (1/2): 126–44.
- Schierhorn, Ann B., Fred F. Endres, and Carl Schierhorn. 2001. "Newsroom Teams Enjoy Rapid Growth in the 1990s." *Newspaper Research Journal* 22 (3): 2–15.
- Smith, Matthew Lee. 1978. "A Socio-Biologicallook at Matrix." *Academy of Management Review* 3 (4): 922–26.
- Stepp, Carl Sessions. 1995. "Reinventing the Newsroom." *American Journalism Review* 17 (3): 28–33. <http://ajrarchive.org/Article.asp?id=1677>.
- Stuckenbruck, Linn C. 1982. *The Implementation of Project Management: The Professional's Handbook*. Reading, MA: Addison-Wesley.
- Sy, Thomas, and Laura Sue D'Annunzio. 2005. "Challenges and Strategies of Matrix Organizations: Top-Level and Mid-Level Managers' Perspectives." *Human Resource Planning* 28 (1): 39–48.
- Wall Jr., William Carter. 1984. "Integrated Management in Matrix Organization." *IEEE Transactions on Engineering Management* 31 (1): 30–36.
- White, Bernard J. 1979. "Alternative Forms of Project Organization." In *Matrix Organization and Project Management*, edited by Raymond Hill and Bernard J. White, 198–99. Ann Arbor, Michigan: MI Business Papers No. 64.
- Wilemon, David L., and Hans J. Thamhain. 1983. "Team Building in Project Management." *Project Management Quarterly* 14 (3): 73–81.
- Witschge, Tamara., and Gunnar. Nygren. 2009. "Journalism: A Profession Under Pressure ?" *Journal of Media Business Studies* 6 (1): 37–59.

TABLES

Table 1: Main Advantages and Disadvantages of Cross-Functional Organization Forms (Source: Ford and Randolph 1992)

Main Advantages	Main Disadvantages
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Creates lateral communication channels that increase the frequency of communication in the organization (Galbraith 1971; Lawrence and Davis 1977; Larson and Gobeli 1987; Joyce 1986; Randolph and Posner 1992)	Violates the single line of authority and the authority equal to the responsibility principles of organizations (Greiner and Schein 1980; Katz and Allen 1985; Denis 1986a; Joyce 1986; Barker, Tjosvold, and Andrews 1988)
Increases the amount of information the organization can handle (Lawrence and Davis 1977; Kolodny 1979; Denis 1986b; Larson and Gobeli 1987)	Creates ambiguity about resources, technical issues, pay and personnel assignments (Lawrence and Davis 1977; Greiner and Schein 1980; Katz and Allen 1985; Denis 1986a; Posner 1986; Larson and Gobeli 1987)
Flexibility in the use of human and capital resources (Lawrence and Davis 1977; Kolodny 1979; Stuckenbruck 1982; White 1979; Kur 1982; Jerkovsky 1983; Kerzner 1984; Denis 1986b; Larson and Gobeli 1987)	Creates organizational conflict between functional and project managers (Wilemon and Thamhain 1983; Kerzner 1984; Katz and Allen 1985; Denis 1986a; Barker, Tjosvold, and Andrews 1988)
Increased individual motivation, job satisfaction, commitment and personal development (Lawrence and Davis 1977; Kolodny 1979; Denis 1986b; Larson and Gobeli 1987; Randolph and Posner 1992)	Creates conflict between individuals who must work together, but have very different backgrounds and perspectives on work, time horizons and goals (Smith 1978; Stuckenbruck 1982; Dill and Pearson 1984; Katz and Allen 1985; Joyce 1986; Posner 1986; Meredith and Mantel Jr. 1989)
Technical excellence is achieved more easily (Galbraith 1971; Lawrence and Davis 1977; Kolodny 1979; Kerzner 1984)	Creates insecurity for functional managers and erodes their autonomy (Davis and Lawrence 1978; Wall Jr. 1984)
	More costly for organization in terms of overhead and staff, more meetings, delayed decisions, and information processing (Lawrence and Davis 1977; Jerkovsky 1983; Pitts and Daniels 1984; Denis 1986a; Larson and Gobeli 1987; DiMarco, Goodson, and Houser 1989; Meredith and Mantel Jr. 1989)
	More costly for individuals in terms of role ambiguity, conflict and stress (Stuckenbruck 1982; Jerkovsky 1983; Denis 1986a)
	Slow response time to multinational issues (Pitts and Daniels 1984; Guterl 1989)

